

## WHAT IS CLAIMED IS:

1. An abnormality diagnostic system capable of storing abnormality diagnostic data used for abnormality diagnosis corresponding to an abnormal event when an abnormality is detected in a vehicle, comprising:

a common data storing section for storing as the abnormality diagnostic data for a plurality of abnormal events, common data which is common irrespective of a difference in the abnormal events; and

an inherent data storing section for storing as the abnormality diagnostic data, inherent data which is inherent to each of the abnormal events.

2. An abnormality diagnostic system according to claim 1, further comprising:

storing means for storing the abnormality diagnostic data;

abnormality judging means for judging an abnormal event when the abnormality is detected;

selecting means for selecting the inherent data corresponding to the judged abnormal event;

and

writing means for writing the selected inherent data together with the common data to the

storing means as the abnormality diagnostic data corresponding to the abnormal event.

3. An abnormality diagnostic system according to claim 2, wherein the common data includes data indicative of behavior of the vehicle.

4. An abnormality diagnostic system according to claim 2, wherein data length of the inherent data is constant irrespective of a difference in the abnormal events.
5. An abnormality diagnostic system according to claim 2, wherein the inherent data comprises a plurality of data, and data length of each data is constant.
6. An abnormality diagnostic system according to claim 2, wherein the storing means includes a common storing region in which each the inherent data can be commonly stored, and wherein the writing means writes the inherent data to the common storing region.
7. An abnormality diagnostic system according to claim 6, wherein the common data includes data indicative of behavior of the vehicle.
8. An abnormality diagnostic system according to claim 6, wherein data length of the inherent data is constant irrespective of a difference in the abnormal events.
9. An abnormality diagnostic system according to claim 6, wherein the inherent data comprises a plurality of data, and data length of each data is constant.
10. An abnormality diagnostic system according to claim 1, wherein the common data includes data indicative of behavior of the vehicle.

11. An abnormality diagnostic system according to claim 10, wherein data length of the inherent data is constant irrespective of a difference in the abnormal events.
12. An abnormality diagnostic system according to claim 10, wherein the inherent data comprises a plurality of data, and data length of each data is constant.
13. An abnormality diagnostic system according to claim 1, wherein data length of the inherent data is constant irrespective of a difference in the abnormal events.
14. An abnormality diagnostic system according to claim 13, wherein the inherent data comprises a plurality of data, and data length of each data is constant.
15. An abnormality diagnostic system according to claim 1, wherein the inherent data comprises a plurality of data, and data length of each data is constant.
16. An abnormality diagnostic data storing method for storing, in storing means, abnormality diagnostic data used for abnormality diagnosis corresponding to an abnormal event when an abnormality is detected in a vehicle, comprising the steps of:
  - judging an abnormal event when an abnormality is detected;
  - selecting at least inherent data which is inherent to the abnormal event corresponding to the judged abnormal event; and

storing selected the inherent data in the storing means as abnormality diagnostic data corresponding to the abnormal event for a plurality of abnormal events, together with common data which is common irrespective of a difference in the abnormal events.

17. An abnormality diagnostic data storing method according to claim 16, wherein the common data includes data indicative of behavior of the vehicle.

18. An abnormality diagnostic data storing method according to claim 16, wherein data length of the inherent data is constant irrespective of a difference in the abnormal events.

19. An abnormality diagnostic data storing method according to claim 16, wherein the inherent data comprises a plurality of data, and data length of each data is constant.